DOCUMENT RESUME

ED 094 543 EC 062 598

AUTHOR	Hops, Hyman; Nicholes, Judith S.
TITLE	CORBEH CLASS [Contingencies for Learning Academic and Social Skills] Program for Acting-Out Children. Observation Coding Manual.
INSTITUTION	Oregon Univ., Eugene. Center at Oregon for Research in the Behavioral Education of the Handicapped.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C. Div. of Research.
PUB DATE	Feb 74
GRANT	OEG-0-70-4152(607)
NOTE	74p.; For related documents, see EC 062 597 and 599
EDRS PRICE	MF-$0.75 HC-$3.15 PLUS POSTAGE
DESCRIPTORS	*Classroom Observation Techniques; Elementary School Students; *Emotionally Disturbed; *Exceptional Child Education; *Guidelines; *Observation

ABSTRACT

The observer training manual is designed to teach concepts and skills required to collect objective, precise information concerning teaching and learning processes in elementary school classrooms. Included are exercises, quizzes and tests so that readers may test their mastery of each skill area. The five instructional units treat the following areas: structure codes indicating whether the child is in a group, individual, or transitional activity, and behavior codes for such behaviors as academic talk and attending; coding forms and recording procedures; use of an auditory timing device to regulate observation intervals; means of testing observer reliability; and field procedures for times before, during, and after observation sessions. (GW)

ED 094543

Center at Oregon for Research
in the Behavioral Education
of the Handicapped
1590 Willamette
University of Oregon
Eugene, Oregon 97401

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED BY

Hyman Hops

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER.

The research or work report herein was performed pursuant to Contract No. NPECE-70-005, OEC 0-70-4152(607), Office of Education, U. S. Department of Health, Education, and Welfare through the Center at Oregon for Research in the Behavioral Education of the Handicapped, an R & D Center funded by the Division of Research, Bureau of the Educationally Handicapped.

Observation Coding Manual for the CLASS Program

February 1974

Hyman Hops and Judith S. Nicholes

EC 062598

Acknowledgements

The authors would like to express their appreciation to the following people for their contributions in the development of this manuscript.

Charles Greenwood, for consultation in design and programming.

Richard Schram, for the design and development of the Auditory Timing Device.

Roberta Taussig, for her editorial assistance.

Monique Braly and Jeannine Ferguson, for their skill and tolerance in typing this manuscript.

Table of Contents

I. INTRODUCTION ---------- 1

A. Rationale and Description ---------- 2
B. Instructions for Quizzes ---------- 3

II. STRUCTURE AND BEHAVIOR CODES ---------- 5

A. Structure Codes ---------- 7
B. Behavior Codes ---------- 10
C. Double Coding ---------- 33

III. THE OBSERVER CODING SHEET AND RECORDING PROCEDURES ---- 35

A. The Header Sheet ---------- 36
B. The Coding Sheet ---------- 39
C. Recording Procedures ---------- 46

IV. THE AUDITORY TIMING DEVICE ---------- 51

A. Purpose ---------- 53
B. Operating Instructions ---------- 53

V. OBSERVER RELIABILITY ---------- 58

A. Rationale ---------- 59
B. Calculating Reliability ---------- 60

VI. FIELD PROCEDURES ---------- 62

A. Appearance ---------- 63
B. Before Observation ---------- 64
C. During Observation ---------- 67
D. Following Observation ---------- 68

UNIT I

INTRODUCTION

RATIONALE AND DESCRIPTION

The purpose of this manual is to prepare you to be a classroom observer. Observers are essential to the collection of data for evaluating teaching and learning. You will become the unbiased and highly trained eye that will provide this project (CLASS - Contingencies for Learning Academic and Social Skills) with the basic information needed to make decisions about the areas of behavior that are being studied.

This training manual has been carefully designed to teach all the concepts and skills required to collect objective, precise information concerning teaching and learning in the elementary school classroom. By reading the exercises, following directions, completing the quizzes, tests, and simulations specified in the manual, you will become a trained and proficient observer.

There are five units contained in this training manual. You are to read each of these units in their entirety and complete quizzes which occur periodically throughout the training manual. The program is designed so that each unit will teach you a set of selected skills which prepare you for the material in the following unit. This programmed approach requires that you master the material in each unit before proceeding to the next. This means you must score 100% correct on each quiz before going to the following material.

When you have successfully completed all of the quizzes for a unit, take the mastery test which will be provided by your supervisor, without relying on the manual. There are mastery tests for each unit.

Check your test with the answer sheet provided by your supervisor. If you made any mistakes, circle them and reread the sections of the manual that deal with the question you missed. When you are satisfied that you understand the material, retake the mastery test. Retake the test as many times as necessary until you reach the required criterion of 100% correct.

When you have met the requirement of 100% correct on all mastery tests, you are ready to use your knowledge of the codes to observe and record video tapes. Check with your supervisor.

INSTRUCTIONS FOR QUIZZES

Follow the procedure below for completing each quiz.

1. Read the information and examples above the quiz thoroughly and carefully.

2. Place the card provided over the answer column on the right of the quiz, which follows each definition or explanation.

3. Begin the quiz. Answer the first question and then check the answer with the one given in the answer column.

    a. If your answer is different than the one given in the answer column, reread the text and correct your answer.

    b. If your answer agrees with the answer column, continue to the next question and follow the same procedures.

    c. If you have problems finding the correct answer in the text, ask your supervisor for help.

    d. Retake the quiz as often as you need to reach the 100% criterion.

QUIZ: Cover the answer column on the right. Complete the following statements.

		Answers
1.	There are ___ units in the CLASS observer training manual.	5
2.	CLASS stands for _____ _____ _____ _____ _____ _____ _____.	Contingencies for Learning Academic and Social Skills
3.	The criterion level of _____ must be achieved to pass each unit.	100%
4.	Quizzes and tests may be _____ as many times as needed to pass the unit.	retaken
5.	This manual has been designed to _____ classroom observers.	train
6.	The mastery test is taken after you have successfully completed all of the _____ for a unit.	quizzes
7.	Actual observing and recording will begin after the 100% correct requirement has been met on all _____ _____.	mastery tests

UNIT II

STRUCTURE AND BEHAVIOR CODES

Unit II contains the definitions of the various classroom structures and behaviors that you will be observing and recording. Each of these are designated by symbols called codes. Each structure or behavior has been assigned an alphabet or alpha code. For example, you will learn that the behavior category attending is represented by the alpha code AT.

Unit II is divided into two subsections: (1) structure categories and codes, (2) behavior categories and codes. In each section there is a brief definition and description of the category, the assigned alpha codes that are used for recording that behavior, and quizzes to insure that you understand the material before proceeding on to the next section.

Throughout this manual you should note that identified child, target child, and subject are synonomous to denote the child the observer has been assigned to code.

STRUCTURE CODES

Structure codes provide information concerning the current classroom situation in which the child (the subject) is being observed. There are three structure codes, group (G), individual (I), and transition (T). It is necessary for the observer to know the definition for each of these so that he/she can recognize the classroom structures immediately.

Group (G)

This category is used when the identified child is part of a teacher designated group activity, such as a small reading group; or when the class is responding as a group to the teacher or to a peer, e.g., the whole group watches the teacher lecturing or listens to a peer reading to the class.

Individual (I)

Use this category when the identified child is engaged in teacher assigned individual work. This includes solitary work assignments and children working together in what the teacher calls individual study. Individual work is usually done without direct, continual supervision by the teacher. Children working separately on their math workbooks at their desks, for instance, or children working on a social studies project together are some examples of an individual situation.

Transition (T)

When the child being coded is moving between academic periods or from one activity to another within an academic period, this code is used. An example of the second condition is children moving from a reading group to their seats to work on individual reading assignments during the same period. In this case, the academic period has not changed, but the structural situation has. Therefore, the child would be coded "group" or "G" while in the reading groups, "individual" or "I" while working at his desk, and "transition" or "T" while moving from one situation to the other.

An example of the first type of transition situation would occur when children, finished with reading, switch to an arithmetic period. Transitions are usually quite brief and may occur intermittently throughout an observation period.

QUIZ: Cover the right hand column with your card and read the statements below. Then write in the left hand column, the structure code which applies (G, I, or T). Check each of your answers against the answers given in the answer column to the right. If your answer does not agree with the answer column, reread the definition and correct your answer.

		Answers
____1.	The teacher has your subject working at a study carrel.	I
____2.	The teacher is lecturing to the entire class, including the child you are coding.	G
____3.	The teacher has dismissed the reading group of which your subject is a member. All the children move toward their desks.	T
____4.	The class is listening as your subject reads his story to the class.	G
____5.	The teacher has instructed the class to work independently on any work they need to complete.	I
____6.	The teacher instructs the class that it is time for recess and they all begin to line up at the door.	T
____7.	The observer walks into the classroom and all children are working in their workbooks at their desks.	I
____8.	The student teacher calls your subject up to the reading group. The child begins moving in that direction.	T
____9.	The teacher is giving a math assignment to the class.	G
____10.	The teacher instructs your subject and a peer to practice their spelling words together using the flashcards.	I

BEHAVIOR CODES

Talk Academic (TA)

This code applies to academic behavior of a verbal nature. For a student, it includes such verbal responses as reading aloud; answering academic questions aloud, either correctly or incorrectly in an appropriate manner; or discussing academic material, either with a peer or with the teacher.

The teacher should be coded TA when giving verbal instructions about an academic subject, answering academic questions, discussing academic material with a group or individual, or giving feedback as to the correctness of a response.

QUIZ: Cover the right hand column. Using the code (TA) that you have learned, mark the examples below with the appropriate code. If the code does not apply write "none." Check your answers with the answers provided in the answer column on the right.

		Answers
1.	Val is reading a poem aloud to the reading class.	TA
2.	Tom writes a story for his reading class.	None
3.	Montrose is talking to the teacher about a math problem.	TA
4.	Mr. Mitchell is explaining a math assignment to the class.	TA
5.	Tim raises his hand to ask a question.	None
6.	Miss Cotton asks Jim, "What is 4 + 4?"	TA
7.	Jim answers Miss Cotton's question, "It is 10."	TA

Attend (AT)

Attend is an appropriate, looking response which takes place in an academic setting. For example, if a peer is reading or reciting, and the individual coded is looking at that peer, the individual would be coded AT. Looking at the teacher, the chalkboard, or other materials having to do with the lesson would also be coded AT.

The teacher is coded AT when watching, viewing, or looking at an individual, group, or materials.

QUIZ: The codes you have learned are TA and AT. Fill in the blanks provided with the codes appropriate to the situations described. If neither of the codes apply write "none" in the blank.

		Answers
1.	Jeff looks at the spelling assignment that has just been written on the board.	AT
2.	Cindy reads a paragraph out loud to the reading group.	TA
3.	Mr. Coons poses a question to the class.	TA
4.	Mike calls out an answer to a question directed at the class.	None
5.	Tim looks at his math workbook during math class.	AT
6.	Debbie watches as a peer reads a story to the class.	AT

Work (WK)

Work is an academic non-verbal behavior and involves a very definite motor response. For example, writing something down on the blackboard or in a workbook when such activity is appropriate is considered work. Playing with materials like games, flashcards, etc., that involve no verbalizations and that are appropriate for the situation is also coded WK. If an individual is reading and is actually moving the marker on the page; then WK is the appropriate code. WK is not coded when someone is just looking at a book or at an individual; that response would be AT.

Teacher is coded as WK when he/she is making definite motor responses with no verbal behavior. This includes such behavior as writing on the blackboard, at a desk, or in a workbook.

QUIZ: Fill in the blanks provided with the appropriate code (TA, AT, WK). If no code applies write the word "none" in the blank. Check your answers with the ones given on the right.

		Answers
____1.	Miss Hopper is writing words on the blackboard for her spelling class.	WK
____2.	Rosie is looking at the reading assignment as the teacher has just instructed.	AT
____3.	Todd is cutting out a picture for the cut and paste exercises.	WK
____4.	Connie is reading out loud to the class and your subject is following along with his bookmarker.	WK
____5.	Mr. Johnson asks a student, "What is the next word Matthew?"	TA
____6.	Matthew responds, "It is Material."	TA

Answers

____7.	After finishing his reading assignment, with the teacher's permission, Marty puts a puzzle together.	WK
____8.	Terry is copying spelling words from the blackboard.	WK

Management (MA)

This code includes all non-academic behaviors which are appropriate during specific situations. For example, during a transition period, children moving from one area to another to change activities would be coded MA. Other instances include getting ready for academic work by moving chairs to a reading group, putting materials away or getting them out, and going to the pencil sharpener and sharpening a pencil, if that activity is appropriate during the period.

Verbal responses which relate to management activities are also included in this category, i.e., those activities that are not academic, but which usually precede academic responses. For example, when the teacher is discussing a new seating arrangement for the reading group or talking about the supply of pencils or workbooks, she would be coded MA. It is important to remember that such talking may ont only precede an academic period but may also be an integral part of it. Thus, when the children are working at individual seatwork and the teacher announces that more paper is available at her desk, MA is coded.

QUIZ: Employing the codes you have learned (TA, AT, WK, MA) code the statements with the appropriate code. Check each of your answers against the ones given on the right.

		Answers
____1.	Ms. Stokes walks from the board to her desk.	MA
____2.	While working on a math assignment, Sam raises his hand.	MA
____3.	Karen watches as a peer recites a poem to the class.	AT
____4.	Mr. Roberts removes a toy from one of his students' desks.	MA
____5.	Ms. Thomas is writing today's writing assignment on the board.	WK
____6.	Mr. Wolfe is lecturing to the class on the topic of general health care.	TA

		Answers
____7.	Carney watches Mr. Wout very intently during the lecture.	AT
____8.	Carey is coloring a picture to go with the story she has just written.	WK
____9.	Jim reads a story aloud to the class.	TA

Volunteer (VO)

This behavior is coded when an individual volunteers or attempts to volunteer academic information either verbally or non-verbally. However, it must be in response to a teacher behavior eliciting academic material. For example, if a student raises his hand or makes a verbal response following a group directed question from the teacher, VO is coded. Note that the response, in order to be coded VO, must be academic and must be voluntary. It must not have been forced to occur by some previous or concurrent behavior, e.g., following the teacher's direct question to a specific student.

DIRECTIONS: Employing the codes you have learned (TA, AT, WK, MA, VO) code the following statements. Check each of your answers against the answers provided on the right.

		Answers
___1.	Mr. Kent watches and listens to a group of children reading aloud.	AT
___2.	Chris raises his hand to answer a question presented to the class.	VO
___3.	Marie is writing a story for her reading assignment.	WK
___4.	Ms. Tombs gives verbal instructions to her geography class.	TA
___5.	Tricia walks up to the teacher's desk to get a second piece of construction paper.	MA
___6.	After the teacher has asked "Who has a pencil?" Jim puts up his hand.	MA

Approval (AP)

The individual gives clear verbal, gestural, or physical approval to another person or group of persons. Verbal examples include statements of praise for someone's work, attitudes, appearance, or conduct. Simple feedback about the correctness of an academic response, e.g., "That answer is right," would not be included unless the statement is made with unusual emphasis, e.g., "That's right!" Gestural approvals include hugs, pats on the back, and other physical contact of a positive nature.

QUIZ: Using the codes you have learned (TA, AT, WK, MK, MD, AP) write the code next to the statement and then check it against the answer given in the answer column.

		Answers
____1.	Mr. Jones says, "Carol, you got that answer wrong, do it again."	TA
____2.	Ms. Pate looks at one of her students' work.	AT
____3.	Mr. Carlson says, "Wow! This is a great paper you wrote Tom."	AP
____4.	Miss Pratt writes a story on the blackboard for the children to copy.	WK
____5.	John reads a passage aloud from his reading book, as directed by the teacher.	TA
____6.	When John finished his reading, Mr. Smith smiled, patted him on the back, and said, "That was really good reading."	AP
____7.	Susie is watching another child recite a poem to the class.	AT
____8.	Kim reads a story problem to the math class.	TA
____9.	Tom cuts out his picture for the cut and paste assignment.	WK

Disapproval (DI)

This code is used whenever an individual expresses clear verbal or gestural disapproval of another person's or group's behavior or characteristics. All verbal comments in this category must be critical of the behavior toward which they are directed. Behaviors or comments which involve simple feedback to the individual about correctness or incorrectness of his response are not included. Statements such as "That's right," or "That's wrong," would be coded TA, not AP or DI. To be coded DI, the statement must be expressed in derogatory tones. Examples include "I don't like the tone of voice you are using," "Your work is sloppy," "Why don't you get a haircut?" and "Can't you ever sit still, even for a minute?" Gestural expressions of disapproval include frowns and shaking of the head.

A teacher simply discussing ways in which the class can work quietly would be coded as MA. However, if the teacher were criticizing the class's previous behavior, she would be coded DI.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI) write the appropriate code to the left of the statement and then check each answer against the answer given on the right.

		Answers
____1.	Mr. Watts says, "Class, today we will all abide by the new rules.	MA
____2.	"Jim, sit down RIGHT THIS MINUTE!" said Ms Jones with a frown.	DI
____3.	Mrs. James says harshly, "Carl, your behavior has been impossible today, GO TO THE OFFICE RIGHT NOW!"	DI
____4.	John is copying the math problems from the board.	WK
____5.	Mr. Craney gives instructions on what behaviors are necessary for a good learning atmosphere.	MA

Disruptive Behavior (DS)

When the individual being coded interferes with another person or a group of individuals, this category is used. The disruption need not be of major proportions. For example, a student who walks by another child who is working and flips the pages of his book would be coded DS; or a student may be making noise loud enough to disrupt others such as talking loudly, banging books, scraping chairs, etc. Note that the acceptable noise level changes with the situation. Behaviors that would be coded DS during individual study time, would not necessarily be coded that way during free time. Other disruptive behaviors include throwing paper airplanes at people, taking an object belonging to someone else without permission, teasing, tickling, pushing a peer's chair or desk, or pulling lightly at the teacher's dress.

DS is also used to code behavior that interrupts on-going interactions. If, for example, a question has been directed at a peer and the coded individual calls out the answer, or if the child interrupts the teacher and a peer who are talking, DS would be coded. Another example occurs when the teacher is explaining the reading workbook, and the child interrupts to say, "I saw that workbook on your desk last week."

QUIZ: Using the codes you have learned (TA, AT, WK, MA, WO, AP, DI, DS) code the following statements. Check each answer against the answer given on the right.

		Answers
____1.	Ms. Saks says with disgust, "Jimmy, your clothes are filthy!"	DI
____2.	Tom throws a wad of paper at a child who is working.	DS
____3.	Mr. Tart is giving a lecture on Russian lifestyles.	TA
____4.	Terry calls out an answer to a question that has been directed at another student.	DS
____5.	During individual seatwork, Bob raises his hand.	MA

		Answers
____6.	Mrs. Caldwell says, "Jerry, you got both assignments right."	TA
____7.	Sharon writes a math problem on the board as directed by the teacher.	WK
____8.	Ms. Mooney is hammering a nail in the wall while the children are taking a history test.	DS
____9.	Ron sticks his tongue out at Mrs. Gray.	DI

Inappropriate Locale (IL)

This code is used only for students. The coded individual is in an area that is not appropriate for the on-going academic activity. For example, a student is walking around the room when he is supposed to be doing assigned individual seatwork; or, instead of joining his reading group, the child stays at his desk.

When coding a child who has gone to the bathroom, wait three minutes without coding if the bathroom is located in the classroom. If he has not appeared again by that time, begin coding him IL. If the bathroom is located outside the classroom, allow five minutes before starting to code the child IL.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL) code the following statements. Check each answer against the answer given on the right.

		Answers
1.	Mr. Clark walks up and down the rows of children.	MA
2.	Jim says to a peer, "What page is our reading assignment on?" during reading period.	MA
3.	When asked by Ms. James to come to his reading group, Greg remains at his desk.	IL
4.	Mr. Lester is writing on papers at his desk.	WK
5.	Ms. Bates says with a smile, "This class is really paying attention today!"	AP
6.	Kim has been out of the room for 15 minutes, having gone to the bathroom.	IL
7.	Terry raises her hand to answer a question posed by the student teacher.	VO

Look Around (LO)

Code LO when an individual is looking around the classroom or staring at something or someone not relevant either to the current academic activity or to a previously stated request. This category would apply (a) when an individual is looking out the window when he/she has a math assignment to complete; (b) when he/she is staring at another child across the room instead of doing assigned individual seatwork; (c) when he/she is looking from object to object around the room while another child is reading aloud; (d) when he/she is looking at the blackboard instead of following along in his/her book while the teacher or a classmate reads; or (e) if he/she is tying his/her shoelace while other children are reading silently in a reading group.

QUIZ: Cover the answer column to the right. Employing the codes you have learned thus far (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO) code the following statements. Check the answer against the answer column on the right.

		Answers
____1.	Terry looks around the room from object to object.	LO
____2.	Teacher scans the class.	AT
____3.	Tommy recites a poem aloud to the reading class.	TA
____4.	Teacher is writing at his desk.	WK
____5.	The assignment is to write a story. Mike stares out the window.	LO
____6.	Terry takes his completed work up to the teacher's desk as he had been instructed to do.	MA
____7.	All children are to be reading in unison from the board. David is looking at the math book.	LO

Physical Negative (PN)

This category is used when the individual being coded attacks or attempts to attack another person with the possibility of inflicting pain; or when the coded individual destroys or attempts to destroy some object. Examples are spanking, kicking, biting, throwing objects at someone, breaking a pencil deliberately, tearing a page from a book, or carving a name on a desk.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN), code the following statements. Check each answer against the answers given in the answer column.

		Answers
1.	Charles throws his book at Fred.	PN
2.	Monty looks at his reading book during reading class.	AT
3.	Connie is walking up and down the rows during science class.	IL
4.	Tony has been told to return to his seat, instead he remains at the blackboard.	IL
5.	Ms. Conrad hits Michael.	PN
6.	Carmen copies spelling words from the blackboard.	WK
7.	Keith stares across the room at another child during individual seatwork.	LO
8.	Marsha rips a page from her reading book.	PN
9.	"Wendy, your desk certainly looks neat today!" said Ms. Carlson.	AP

Play (PL)

The coded child is playing when play activity is not appropriate according to the teacher's instructions. A child may, for example, be playing Tic-Tac-Toe with another child when he is supposed to be doing individual seatwork, or he may be doodling or running a toy truck across his desk instead of attending to his workbook assignment.

Note that such activities are not coded PL if the subject has completed his work and the teacher has specifically stated that play is appropriate once work has been finished. If the student has not completed his assigned work and is playing, then PL would be the correct category.

QUIZ: Using the codes you have learned thus far (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN, PL), code the following examples appropriately. Check your answers against the answer column.

		Answers
____1.	Larry is running a toy truck around his desk during Social Studies.	PL
____2.	Miss Jones spanks Harold.	PN
____3.	Carey looks around the room from object to object.	LO
____4.	Jimmy is gouging holes in his desk during free time.	PN
____5.	Pam throws a paper airplane at another child.	DS
____6.	Connie looks at the teacher as she is giving the class a math assignment.	AT
____7.	Mr. Robertson is writing sentences on the board.	WK
____8.	Jim is putting a puzzle together instead of completing his math assignment.	PL

Irrelevant Talk (IT)

This category includes all inappropriate verbal behaviors which are not specifically included in other codes. All discussions or comments that are not relevant to the then current activity of the class are coded IT. During academic periods, non-academic discussions are inappropriate; if the teacher is discussing management procedures, then discussions about academic materials are irrelevant. IT is always defined in terms of what is appropriate for the specific situation. Some academic materials do call for discussion of topics that would normally be inappropriate. For instance, in some social studies or citizenship discussions, the individual's home, personal experiences, recess, etc., may be relevant and comments would therefore be coded TA, not IT.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN, PL, IT), code the following statements appropriately. Check your answers against the answer column.

		Answers
____1.	Mrs. Gill reads the classroom rules to the class.	MA
____2.	Teacher looks at the assignment she has just written on the board.	AT
____3.	During math, Terry tells the kid next to him about his new bike.	IT
____4.	Linda says, "Gee, you are really DUMB Marty."	DI
____5.	James answers a question that has been posed to the class.	VO
____6.	During geography Kay asks the teacher, "Why didn't you wear your coat?"	IT
____7.	During Moon study, Carey asked, "Are the astronauts still on the moon?"	TA

Answers

____8.	Art assignment is to construct a picture; Jim is drawing his picture.	WK
____9.	The assignment is to discuss plans for the Xmas party. Marshall asks Tami, "What do we have in math?"	IT
____10.	Tanya and Dawn are assigned to read to each other. When Tanya finishes reading the first paragraph, Dawn says, "You really read GOOD!"	AP

Teacher Leaves Situation (TL)

The code TL is used only as a teacher code. TL signifies that the teacher is no longer involved in the same situation as the subject being coded. Examples of TL include (1) the teacher having left the room, (2) the teacher working with a small reading group while your subject is working at an individual assignment at his/her desk, and (3) the teacher leaving a small group of which your subject is a member.

When TL is coded no direction needs to be marked. (See Unit III, page 43.)

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN, PL, IT, TL), code the following statements. Check your answer with the answer column to the right.

		Answers
____1.	"Bill, your writing skills are really improving," said Miss Brown with a smile.	AP
____2.	Miss Thompson walks out of the class while class is still in session.	TL
____3.	Sally is looking at her reading book during reading class.	AT
____4.	Denice hits a child with a ruler.	PN
____5.	Mr. Karr works with a reading group which does not include your subject.	TL
____6.	Tim is looking at the ceiling.	LO
____7.	Miss Bink is positioned in a reading group in which your subject is a participant but Miss Bink is praising Nancy who is not in the group.	TL

cm, co, nc

These three behaviors are never coded by themselves. They are always double coded, i.e., coded at the same time as one or more other codes. They provide information only about the relationship between commands or directions given in the classroom and about the individual's degree of compliance with those commands. Other codes are used to describe the content of the commands and compliance/ non-compliance.

Command (cm)

This code is used whenever a direction given by one person to another is so clearly stated that the second person presumably knows exactly what to do in order to comply or obey. Commands may be related to academic, management, or disciplinary matters. Included in this category are commands stated as questions which require an immediate response by the person to whom they are directed, e.g., "What is two and two, Marvin?"

Examples include such statements as "Sharpen your pencil," "Tell me the number of people who are in the house that Jack built," "Read the next page," "Go to your seat," and "Close your book."

If the command is academic, then both TA and cm should be checked; if the command is management, both MA and cm should be checked. If the command is given in a disapproving manner, DI should be checked in addition to cm.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN, PL, IT, TL, cm) code the following statements appropriately. Check your answer against the answer column.

		Answers
____1.	Teacher says, "Jimmy, read the next paragraph."	cm TA
____2.	Ms. Martin says, "Tom, go sharpen your pencil."	cm MA

		Answers
____3.	"Mike, I want you to go to the office, right now!" said Mrs. Kaufman with a scowl.	cm DI
____4.	Jim watches a child across the room.	LO
____5.	"Roger, I like the way you are sitting up straight." says the teacher, smiling.	AP
____6.	"Carl, close your book," said Miss Taylor.	cm MA

Compliance (co)

This code is used whenever an individual complies with a clearly stated command. The co category is double coded with the category which best describes the complying behavior. If, for instance, the teacher asks "What is two and two?" and the student answers "Four," the correct coding of the student's behavior would be both TA and co. If the teacher has asked the children to return to their seats, and the child coded obeys, then the correct code is MA and co. The child does not have to have completed complying for the co code to be used; he must only have begun doing what the command directed within the time interval following the cm.

QUIZ: Employing the codes you have learned (TA, AT, WK, MA, VO, AP, CA, DS, IL, LO, PN, PL, IT, TL, cm, co), code the following statements. Check your answers against the answer column to the right.

		Answers
___1.	Having been told to go to his seat, Jeff moves in the direction of his desk.	co MA
___2.	Mrs. Daphney says, "Kim, go to the board."	cm MA
___3.	"Carl, get your feet off that table right now," Mr. Rogers said harshly.	cm DI
___4.	Missie turns to page 86 as Miss Wilson has just instructed.	co MA
___5.	"Jennie, who is the president of the U.S.?" asked Mr. Black.	cm TA
___6.	Jennie replies, "I think it is Columbus."	co TA
___7.	"Harley, please go to the office and get some new pencils," said Ms. Brown.	cm MA

Non-Compliance (nc)

This code is used whenever an individual being coded fails to do what has been requested of him in a clearly stated command or question. Here, too, the behavior is double coded with whatever category specifically describes non-complying activity. For example, when the teacher has asked the student to begin working and instead he looks out the window, the correct coding would be nc and LO.

If, on the other hand, he is asked, "How much is two and two?" and answers "Five," he would be coded TA and co, not nc. He did answer the question, although incorrectly, thus complying with the command. Only if he refused to answer would his behavior be coded nc.

QUIZ: Employing the codes you have learned (TA, AT, WK, MA, VO, AP, DI, DS, IL, LO, PN, PL, IT, TL, cm, co, nc), code the following statements. (Note that they come in pairs, with 1b referring to the same situation as 1a, etc.) Check your answer against the answer column to the right.

		Answers
____1a.	Ms. Jones said, "Charles, read the next sentence."	a. cm TA
____1b.	Charles falls from his chair and lays on the floor.	b. nc IL
____2a.	Mr. Carr said, "Joe, sharpen your pencil."	a. cm MA
____2b.	Joe takes his pencil and moves in the direction of the pencil sharpener.	b. co MA
____3a.	Ms. Thompson said, "Class, you are to begin writing your stories."	a. cm TA
____3b.	Mike writes his name on the top of his paper.	b. co WK
____4a.	"I want all children to line up in the back of the room," said Mr. Greene.	a. cm MA
____4b.	Mary continues writing at her seat.	b. nc IL

		Answers
____5a.	"Eyes to the board," said Ms. Carne.	a. cm MA
____5b.	Terry looks in the direction of the board.	b. co AT
____6.	"Tracy, go to the desk and get a piece of construction paper," says Ms. Brown.	cm MA
____7a.	Mr. Thomas says, "Class, take out your math books.	a. cm MA
____7b.	John takes his book from his desk.	b. co MA
____8a.	Mr. Blake says, "Tim, go to the board and do problem 6 and 7."	a. cm MA
____8b.	Tim slinks back into his seat.	b. nc IL

DOUBLE CODING

Double coding is used not only with the categories cm, co, and nc, but whenever one individual displays two behaviors simultaneously. The only exceptions to this rule are AT and TL; they are never double-coded. The following are examples of double coding:

1. A child is out of his seat talking to a peer about his new bike. This would be coded both IL and IT since the two behaviors are occurring simultaneously.

2. The teacher is giving verbal instructions to the class while writing the assignment on the board. This would be coded TA and WK.

QUIZ: Using the codes you have learned (TA, AT, WK, MA, VO, AP, DI, IL, LO, PN, PL, IT, TL, cm, co, nc), code the following statements. Double code when necessary. Check your answer with the answer column to the right.

		Answers
____1.	Mike raises his hand for help, while continuing to write in his workbook.	MA WK
____2.	"Go to your seat Randy," said Mr. Gray.	cm MA
____3.	Jim raises his hand to answer a question presented to the class.	VO
____4.	Mr. Andrews writes spelling words on the board while explaining the assignment.	WK TA
____5.	Mike calls out an answer to a question directed to the class.	VO TA
____6.	While writing instructions on John's worksheet, Miss Brown says, "You are really waiting patiently."	WK AP

Answers

_____7.	Connie raises her hand for help while rolling her pencil down the desk.	MA PL
_____8.	Connie is running up and down the rows screaming.	IL DS
_____9.	Carrie looks at her math book during math class.	AT
_____10.	Carl is reading out loud to the class while following along with his bookmarker.	TA WK

UNIT III

THE OBSERVER CODING SHEET AND RECORDING PROCEDURES

HEADER SHEET

The header sheet (see page 37) is to be filled out at the beginning and end of every observation segment. The header items describe the time, place, and circumstances of the observation and identify the individuals whose behavior is being recorded. Some of these items can be filled out before going into the classroom. The others should be filled out at the beginning of each observation session, before actual recording begins. The observer should make sure that all the items have been filled in. Failure to do so may make identification of the data difficult and use of the data questionable.

The header page should be filled out in the manner described below.

1. Date. Include the day, month, and year.

2. School District. Write in the city and state in which the observations occur. (Use school district name if different from city name.)

3. School.

4. Teacher. A class may have more than one teacher. If one of them cannot be considered the main teacher of the identified child, use as many of the names as necessary to identify the child's situation.

5. Child. Use the child's full name or identification number.

6. Grade. Occasionally a child is in a split-grade classroom. When this occurs, use the grade of the identified child.

7. Observer. Use three initials, please. If you only have two initials, contact your supervisor and a third one will be assigned.

8. Time. This item is filled in at the beginning and end of an observation session. Place the time on the appropriate line.

Header Sheet

Date_____ School District_____ School _____

Teacher _____ Child _____ Grade _____

Observer _____ Time: Begin_____

End _____

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	The header sheet provides interesting information.	F identifying
____2.	There should be a header sheet at the beginning and end of each observation.	True
____3.	Every item on the coding sheet must be filled in.	F header
____4.	Observers should identify themselves with two initials.	F-three
____5.	If there is more than one principal teacher, identify as many as possible.	True

CODING SHEET

Header Items

At the top of each coding sheet (see page 41) are four items which must be filled out on every page. These are the date, the child's name or number, the observer's initials, and the page number. Fill them out as follows:

1. Date. Include the day, month, and year.

2. Child. Use the child's full name or identifying number.

3. Observer. Use three initials, please. If you have only two initials, contact your supervisor and you will be assigned a third.

4. Page. The first sheet used in any given observation is No. 1. Each successive sheet should be identified clearly by its number.

There is one item that is used only when a reliability check is being made.

5. Reliability (Unit V). If two observers are working together during an observation to check their reliability, the initials of the second observer are recorded in this space. These are required only on the first and last pages of the reliability data.

There are two other identifying items to be filled in. These, however, are required only when they first occur, and whenever they change. They identify the on-going academic situation in the classroom. These items are located on the right side of the coding sheet and are abbreviated as Act. for Academic Activity, and Str. for Structure.

6. Structure. The structure coded is Group (G), Individual (I), or Transition (T) as defined in Unit II. On page 1, record it on the first row and thereafter whenever a new structure occurs.

7. Academic Activity. In this space, record the name of the ongoing activity. A list of reading and math activities regularly found in the primary grades follows. As with the structure, the academic activity occurring when the observation begins is recorded on line one and thereafter whenever a new one occurs.

Table of Academic Activities

READING	ARITHMETIC
Phonics	Calendar
reading test	cuisenaire rods
Electric Company (TV)	time telling
alphabet	
writing	
spelling	
foreign languages	
English	
Peabody dictation	
pasting	
coloring	

(these activities should be coded if related to Reading)

Specific rules and examples of activities:

1. Tests are coded according to their content. If the test is on reading, write in "reading" as activity.

2. When the children are moving from one activity to another (in transition), do not record an activity while the transition is not directly related to either the preceding or the succeeding activity. If transitions are included in an activity, they are coded as part of that activity.

Date _____ Child _____ Observer _____ Reliability _____ Page _____

Teacher	Subject	Teacher	Peer	
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____
TA IL 1	1 TA IL 1	TA IL 1	5 TA IL 1	
AT LO	AT LO	AT LO	AT LO	
WK PL 5	WK PL 5	WK PL 5	WK PL 5	
6 MA IT 6	MA IT 6	6 MA IT 6	MA IT 6	
7 VO DS 7	VO DS 7	7 VO DS 7	VO DS 7	
8 AP DI 8	AP DI 8	8 AP DI 8	AP DI 8	Str.____
9 cm PN 9	cm PN 9	9 cm PN 9	cm PN 9	
TL co nc 0	co nc 0	TL co nc 0	co nc 0	Act.____

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	Each page is to be numbered.	True
____2.	Date includes day, month, and time.	F-year
____3.	Child must be filled in with name or any number.	F identifying
____4.	Observers are to identify themselves with their names.	F initials
____5.	Reliability blank is to be filled in only on the first and last pages of reliability.	True
____6.	Activity is to be recorded for every page.	F-change
____7.	The reliability blank is to be filled in with the second observer's initials.	True

Person, Behavior, and Direction

The coding sheet (page 41) has six rows of four boxes each for recording the behaviors and directions of specific persons. Two boxes on each row are coded in each eight-second interval. There are 24 coding boxes per coding sheet. This provides for 96 seconds of data per page.

Each time a person's behavior is recorded, three pieces of information are required: Whose behavior is it? What is the person doing? At whom or at what is the behavior directed? In other words, you must identify the person displaying the behavior, the behavior being exhibited, and its direction.

1. Person. Now take a closer look at whom you are to code and which columns are used. The first and third boxes on each row are used for the teacher, the second is designated for the subject, and the fourth for a peer(s).

The first column of the coding boxes designated for teachers, have the symbols 6, 7, 8, 9, and TL. These are defined as:

6 - teacher, professional (usually the child's homeroom teacher)

7 - teacher aide (any permanent professional aide or student teacher)

8 - volunteer teacher or visitor (included are parents, upper level students)

9 - is used as a special code in the teacher's box, when added to 6, 7, or 8, will indicate the presence of a second teacher in a given category. For example, if there are two teachers of the number 6 category in the same classroom, one would be coded 6, and the other 6, 9.

TL - this is a special code used whenever the teacher leaves the group of which the identified child is a member (see Unit II)

You will note that the first column of the subject's coding box has only the number 1. This is because you will only be observing one identified subject during each observation period.

1 - refers to a child identified for the CLASS program.

The first column of the coding box designated for peers contains only the number 5.

5 - refers to any unidentified peer of the same sex and in the same activity and structure as subject #1.

2. Behavior. The second and third columns in each of the coding boxes contain the behavior codes that the observer has already learned. At least one behavior should be marked in each of the boxes.

3. Direction. The fourth column in each coding box designates the direction toward which the coded behavior is aimed. The symbols used for the direction are 1, 5, 6, 7, 8, 9, and 0. Below are the numbers and descriptions of the seven possible directions.

1 - a child identified for the CLASS program.

5 - any or all other identified peers of either sex; can be either an individual peer or a group of peers but not the entire class.

6 - teacher, professional

7 - teacher aide

8 - teacher, volunteer, or visitor

9 - the entire group of which the identified child is a member; or when 9 is used in conjunction with 6, 7, or 8, it refers to a second member of that category.

0 - any inanimate object, such as a book, chalkboard, pencil, e.g., looking at a book or breaking a pencil.

QUIZ: Reach each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	Two boxes are coded in each 10 second interval.	F - 8
____2.	6 is the symbol used for teacher's aide.	F - 7
____3.	When the teacher leaves the situation that the child is in, it is coded as 9.	F - TL
____4.	If there were two teachers in the room, the first teacher would be coded as 6 and the second teacher as 6, 9.	True
____5.	The second column of boxes is designated for coding peers.	F-subject
____6.	The symbol 1 designates a child identified for the MACIE program.	F-CLASS
____7.	The fourth column in all the boxes designates the direction at which the behavior is aimed.	True
____8.	The symbol 1 is used to indicate an inanimate object.	F - 0

RECORDING PROCEDURES

The auditory timing device produces an auditory signal or beep every 8 seconds. A beep signifies the beginning of each 8-second interval. This signal is the cue for the observer to look at the teacher's behavior and its direction and at either the subject or a peer's behavior and its direction. Then, the observer records the observed behaviors and directions in the appropriate coding boxes.

The teacher's behavior is observed and recorded in every 8-second interval. The teacher is always the person that the observer looks at first. The subject and peers are observed in alternate 8-second intervals. There is only one subject. When coding peers, however, the observer alternates among all peers of the same sex as the subject who are in the same structure and academic situation. The same peer should not be observed in two consecutive peer observations unless there are no other same-sex peers in the same situation as the subject. (See Alternate Peer section, page 50, for example.)

Thus, coding proceeds as follows:

1. In the first interval of an observation period, at the first beep, the observer looks at the teacher and at the subject, and records their behaviors and directions in the first and second coding boxes.

2. At the next beep, the observer looks at the teacher and at one of the same-sexed peers in the same academic activity and structure as the subject and records their behaviors and directions in the third and fourth boxes.

3. In the third interval, the observer returns to the recording of the teacher and subject's behavior and in the fourth interval, the behavior of the teacher and a second peer. Thus, in the odd intervals, the teacher and subjects' behavior is recorded and in the even intervals, the teacher and alternate peers.

In the following example, record the person, behavior, and direction in the appropriate boxes by slashing the correct code, e.g., ~~TA~~.

EXAMPLE: (BEEP) Ms. James, the teacher aide, is explaining to Tim (subject) the new classroom rules about remaining in seats, raising hands to speak, etc. Tim looks at Ms. James as she is talking (BEEP) Carl (a peer) is tugging at Ms. James' arm as she continues talking to Tim.

Teacher			
	TA	IL	1
	AT	LO	
	WK	PL	5
6	MA	IT	6
7	VO	DS	7
8	AP	DI	8
9	cm	PN	9
TL	co	nc	0

Subject			
1	TA	IL	1
	AT	LO	
	WK	PL	5
	MA	IT	6
	VO	DS	7
	AP	DI	8
	cm	PN	9
	co	nc	0

Teacher			
	TA	IL	1
	AT	LO	
	WK	PL	5
6	MA	IT	6
7	VO	DS	7
8	AP	DI	8
9	cm	PN	9
TL	co	nc	0

Peer			
5	TA	IL	1
	AT	LO	
	WK	PL	5
	MA	IT	6
	VO	DS	7
	AP	DI	8
	cm	PN	9
	co	nc	0

Double Coding

When the person you are coding displays two distinct behaviors at the same time, you are to code both behaviors (refer to Unit II). Each behavior (except TL) will have a direction and both directions are to be noted.

The format to be used by the observer to distinguish between the behavior and direction pairs is as follows.

1. Slash the first behavior and its corresponding directions.

2. Circle the second behavior and its corresponding direction.

Code the following example in the boxes provided.

EXAMPLE: (BEEP) Mr. Thompson is writing the assignment on the board while giving verbal explanation to the class. Steve (subject) is tossing his eraser into the air while telling Terri about his new car. (BEEP) Mr. Thompson says, "Steve, get your math book out." John (a peer) has his hand raised while he is writing the assignment down. (BEEP)

Teacher			
	TA	IL	1
	AT	LO	
	WK	PL	5
6	MA	IT	6
7	VO	DS	7
8	AP	DI	8
9	cm	PN	9
TL	co	nc	0

Subject			
1	TA	IL	1
	AT	LO	
	WK	PL	5
	MA	IT	6
	VO	DS	7
	AP	DI	8
	cm	PN	9
	co	nc	0

Teacher			
	TA	IL	1
	AT	LO	
	WK	PL	5
6	MA	IT	6
7	VO	DS	7
8	AP	DI	8
9	cm	PN	9
TL	co	nc	0

Peer			
5	TA	IL	1
	AT	LO	
	WK	PL	5
	MA	IT	6
	VO	DS	7
	AP	DI	8
	cm	PN	9
	co	nc	0

QUIZ: Fill in the blanks with the correct word. Then check your answer with the one given in the answer column.

		Answers
1.	You double code when the person you are coding does _____ distinct behaviors at the same time.	two
2.	The first _____ and direction are always slashed.	behavior
3.	The second behavior and direction for the same person are always _____.	circled
4.	_____ are coded for all behaviors except TL.	Directions

Alternating Peers

When coding, the observer is to alternate peers in the manner that is most logical. For example, a small reading group should be coded in the manner described below (F = female, M = male):

M	F1	F2	M	F3	F4
P	P	P	P	P	P

Subject - F

Teacher

1. Observe Teacher and Female Subject.
2. Observe Teacher and Female Peer 1.
3. Observe Teacher and Subject.
4. Observe Teacher and Female Peer 2.

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	A BEEP signifies the beginning of each 12 second interval.	F - 8
____2.	The observer looks at the child first.	F-teacher
____3.	The subject is never the same child.	F-always
____4.	When coding peers the observer is to alternate among all same-sex peers who are in the same structure and academic situation.	True
____5.	The peer is observed every 8-second interval.	F-teacher
____6.	The same peer should not be observed two consecutive times unless there are no other same-sex peers in the same situation as the subject.	True

UNIT IV

THE AUDITORY TIMING DEVICE[1]

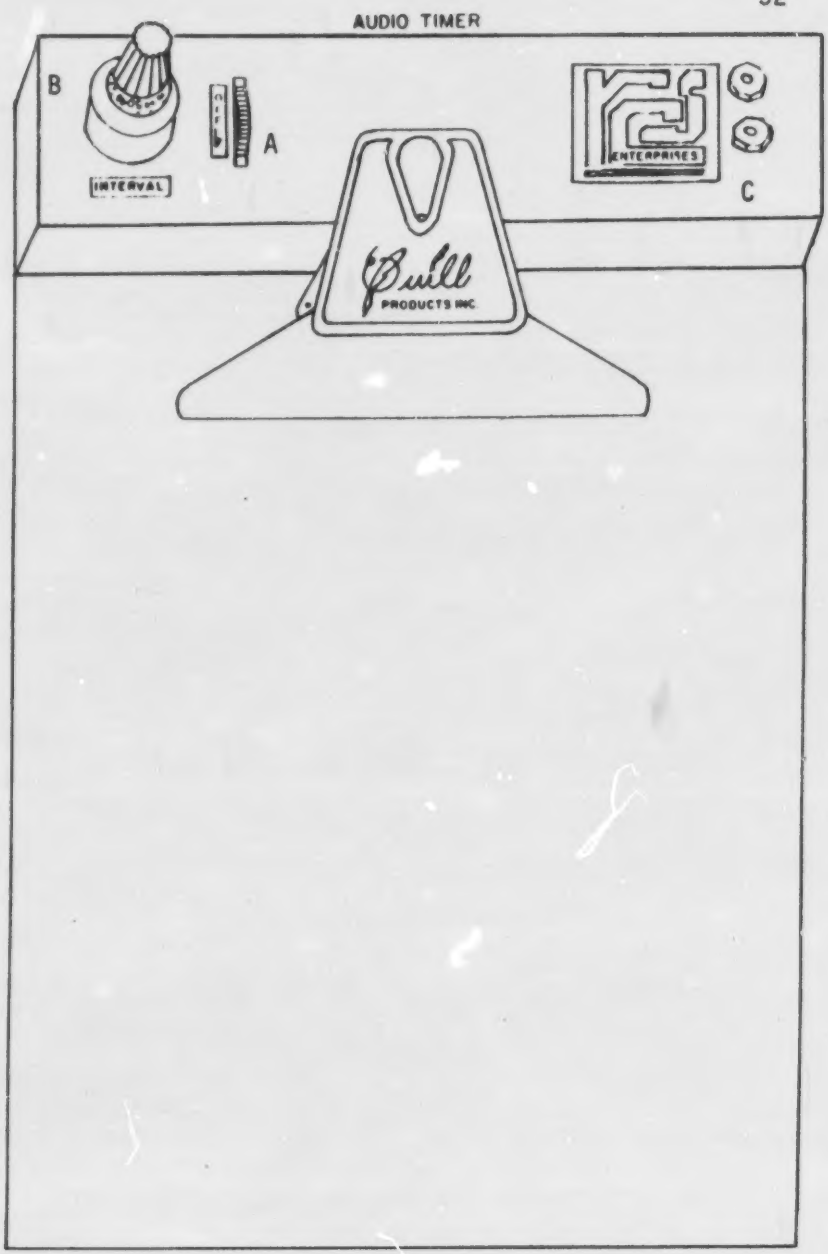

Figure 1

PURPOSE

The purpose of the auditory timing device (timer) is to systematize data collection in the classroom setting. The instrument is built into a clipboard used to hold the coding sheets on which classroom behaviors are recorded. The timing device signals the observer that an observation interval is beginning by producing an audible "beep" through an earphone worn by the observer and connected to the timing device.

OPERATING INSTRUCTIONS

The auditory timing device is located on the top of the clipboard (see diagram). This timer has three very important parts with which the observer must be familiar.

Figure 2

The figure above is a representation of the significant parts of the timing device.

(a) The off-on switch.

(b) The interval knob.

(c) The two earphone jacks.

Now we will take a close look at each of these parts, their purpose, and their use during observations.

Figure 3 illustrates the on-off switch. To turn the device off, turn in the direction of the arrow towards the bottom of the clipboard. Observers should turn the device off after completing each observation. Doing this will insure that the batteries do not run down and that the device will work the next time it is used. To turn the device on, push the switch in the opposite direction, away from the arrow. Turn the timer on approximately one minute before the observation begins to give it time to warm up.

Figure 3

Figure 4 illustrates the interval adjustment counter. The control knob is used to set the device to an eight-second interval. To set it correctly, use a stop watch and turn the black knob until the position is found that is as close to an eight-second interval as possible.

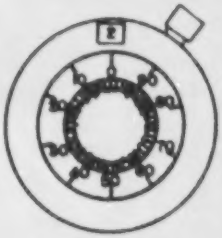

Figure 4

Now turn your attention to the black (locking) lever on the right side of the knob. This lever is placed upward to the one-o'clock position to allow the device to be set to the correct interval. Once the eight-second setting has been found, push the lever downward to the three o'clock position. This procedure will lock the interval in place; thus there is no chance that the interval setting will accidentally change during the observation period. The interval should be checked with a stop watch at the beginning of each observation day.

To Set Interval

1. Turn unit on.
2. Release locking lever (push up).
3. Rotate INTERVAL ADJUSTMENT COUNTER clockwise to the 0/0 position.

4. Insert earphone -- you should now hear a beep occurring approximately every 2.5 seconds.

5. Rotate INTERVAL ADJUSTMENT COUNTER knob clockwise past the 1/0 position and toward the 2/0 position until an approximate 8-second interval is located (see table below for relationship between settings and intervals).

DIAL SETTING OUTER/INNER	APPROXIMATE LENGTH OF INTERVAL
0/0	2.5
1/0	3.8
2/0	9.0

6. Time the interval with a stop watch and adjust accordingly. At the beep, start the stop watch, stop it immediately at the next beep. Adjust the counter for either a longer or shorter interval as required. Be sure to adjust the counter only after you have timed the interval with the stop watch. Adjustments made while you are timing the interval with the stop watch change the length of the interval and are inaccurate.

7. Set locking lever (push downward).

Figure 5 represents two jacks for ear plugs. For most observations you will require one ear plug, and therefore one jack. The second jack is used when you are observing a child or classroom with another observer at the same time to determine how well you agree. This allows both observers to hear the same signal so that they can code the same person at exactly the same time. Always plug an earphone in before observing.

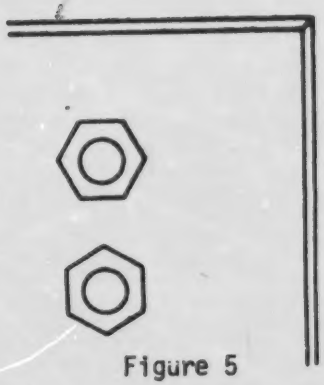

Figure 5

QUIZ: Cover the answer column to the right. The following statements are to be labeled either T-true or F-false. If your answer is F, change the underlined word or words to make the statement true.

		Answers
____1.	The auditory timing device is to be set at 12 seconds.	F-eight
____2.	The auditory timing device is used when observers are taking a break.	F-turned off
____3.	The auditory timing device frees the observer from using visual aides such as stop watches, clocks, and watches while observing.	True
____4.	You use the interval adjustment counter control knob to turn the device off.	F-set the interval
____5.	The observer can use either earphone jack when observing.	True
____6.	The black lever on the right side of the interval knob is used to lock the interval in place.	True
____7.	The observer should leave the device on from day to day.	F-turn - off
____8.	The time interval should be checked every third day.	F-every day
____9.	Both earphone jacks are used only during agreement checks.	True
____10.	The device should be turned on one half hour before observation begins so that it will be warmed up.	F-one minute
____11.	The observer should turn the device off after each observation.	True

UNIT V

OBSERVER RELIABILITY

RATIONALE

Every observer needs to check frequently to ensure that she/he is recording classroom behavior as was intended by the research designers. Individual observers who do not monitor their behavior tend to develop idiosyncratic definitions even after being highly trained. In fact, CORBEH has found that even pairs of observers can drift away from the original behavioral definitions while still agreeing with each other. For these reasons, constant monitoring is crucial for the collection of reliable and valid data.

One way to monitor your observational skills is to record classroom behaviors of the same individuals in conjunction with another observer. Using your own and the other observer's coded sheets, you can compute the degree to which the recordings match. The result is referred to as an estimate of the reliability of observer agreement. The higher the reliability, the greater the agreement between observers and the greater the chance that the recordings accurately reflect the behaviors they have observed. Such checks should be accomplished at every observation during training and at least once a week after training has been completed.

Observers should rotate so that estimates of reliability are obtained between all pairs of observers at least once before the same pair of observers are checked a second time. In this way, if one observer is consistently having low agreements with others, the source of the mismatching can be investigated. The rotating procedure protects against the possibility of two observers developing mutual idiosyncracies which result in high reliabilities from them, but unknown reliabilities with other observers. For instance, if four observers A, B, C, and D, are always checked by comparing A with B and C with D, no information is available on the reliabilitieies between A and C, A and D, and B and D. By rotating, each observer is checked with every other observer so that problems are less likely to develop.

Adequate reliability must be maintained for each component of the recording system, i.e., for agreement about the subject, behaviors, and directions. It's easy to see that recording the teacher's behavior correctly, but the direction incorrectly, only tells half the story. For this reason, agreements and disagreements are calculated for both the behaviors and directions.

CALCULATING RELIABILITY

In each box, several combinations of agreement and disagreement may occur: observers may agree on the behavior(s) and the direction(s); they may disagree on the behavior(s) and/or direction(s).

Follow the directions as outlined below for determining the reliability, or percent agreement of an observation.

1. Use only one observer's sheet for tallying.

2. On each line, score one point for any exact agreement between observers, i.e., one point for agreement on any behavior, and one point for agreement on its direction.

3. On each line, tally one point for any disagreement between observers. Again, keep in mind -- you are to look for three kinds of disagreements: (a) cases where both observers record behavior, or direction, but do not agree on the code, (b) cases where only the first observer records an event -- not recorded by the other, and (c) cases where the second observer records an event which is not recorded by the first.

4. Add up the total number of agreements per sheet.

5. Add up the total number of disagreements per sheet.

6. Add up the total number of agreements for the complete recording session.

7. Add up the total number of disagreements for the complete recording session.

8. Compute the total number of agreements and disagreements for both observers by adding (6) and (7).

9. Divide the total number of agreements (6) by the grand total (8) and multiply by 100.

This number will be the percentage agreement between two observers. Observers must reach a minimum reliability of 85% for the data to be considered valid.

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statemetns to make them true.

		Answers
____1.	Observers should check themselves occasionally to ensure that they are recording classroom behaviors as was intended by the research designers.	F-frequently
____2.	Constant monitoring is crucial for the collection of reliable and valid data.	True
____3.	In this system, the comparison of three observers' data taken on the same individuals at the same time is called reliability.	F-two
____4.	Validity is an estimate of observer agreement.	F-reliability
____5.	Reliability should be checked a minimum of twice a week after training.	F-once
____6.	During training reliability should be taken every day.	True
____7.	The rotating method used in taking reliabilities should reduce the possibility of observers developing mutual idiosyncracies in coding.	True
____8.	In computing reliability, you are to check both the subject and the direction.	F-behavior
____9.	Observers are to reach a minimum of 90% reliability for their data to be considered usable.	F - 85%
____10.	Use both observers' coding sheets for tallying.	F - one

UNIT VI

FIELD PROCEDURES

APPEARANCE

Observers are to dress in accordance with the public school dress code. This means, for example, that females can wear pantsuits, dresses, or clean, neat pants and top sets, and shoes. Males can wear clean, neat slacks, shirts, socks, and shoes. Clothes may not have holes and/or patches. Jeans and tee shirts are typically not allowed in public school settings. Remember your clothes should be in good shape, without rips, tears, or patches.

Hair should be well groomed. Males may have long hair if it is worn pulled back. Beards and mustaches should be neatly trimmed.

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	Observers may wear patches on their clothes.	F-may not
____2.	Beards should be neatly trimmed.	True
____3.	Jeans and tee shirts are allowed.	F-are not
____4.	Females may wear pantsuits.	True
____5.	Observers are to dress in accordance with the Public School dress code.	True
____6.	Males may not have long hair.	F-may
____7.	Clothes must be in good shape, no tears, rips, etc.	True
____8.	Observers should not wear shoes.	F-should

BEFORE OBSERVATIONS

The observer is responsible for several tasks before actual observing begins. Observer duties include the following:

1. Check that the auditory device is set for eight-second intervals and is working accurately. The device should be routinely checked each day and at any other time that you suspect it may not be functioning correctly. When the auditory timing device is not being used, make sure that it is disconnected. The device runs on batteries which can drain rapidly if left on for any period of time.

2. Before leaving for the school, check to be sure that the regular teacher(s) and the target child are present. If either is absent, cancel the observation.

3. Be sure you know, before leaving the office, where the school is located. Use a map or check with others who have been to the school and write down the telephone number and address of the school. If you become lost, telephone the school so that a staff member can direct you.

4. Before leaving the office, check to be sure you have an auditory timing device, earphone, clipboard, two sharp pencils, and an adequate supply of recording forms.

5. Arrive at the observation site fifteen minutes before observations are to begin. This will enable the observer to check in with the office and find the right classroom.

6. Follow the rules that apply to school visitors.

   a. Check in with the secretary at the office and tell her that you will be observing in (teacher's name) room from _____ to _____. When going into a new school, in addition to the above, give your name to the secretary.

   b. After reporting to the office, go directly to the classroom. Plan to arrive in the classroom five minutes before the scheduled observation. If it is your first visit, introduce yourself to the teacher and tell her the name of the child to be

observed so she can point him out to you in an inconspicuous manner.

c. Minimal conversation should take place between you and the teacher and students. This rule is to be applied at all times. Observers have occasionally been placed in difficult positions when they have been asked by teachers to give professional advice concerning difficulties with children in the classroom. To avoid this awkward situation, talk primarily about the simple mechanics of the observation, e.g., where to stand, and not about particular children's good or bad points. Extend the usual social amenities, e.g., "Good morning," but hold no extended conversations. Teachers have been told that these rules are in effect and should not expect lengthy interactions.

Conversations with the children should never occur. This insures that your presence affects the observation as little as possible. As soon as you become an active part of the environment, i.e., when children begin to initiate interactions with you, the neutrality of your presence is jeopardized. Children accommodate quickly to a neutral observer and continue their activities as though one were not present.

QUIZ: Read each statement and mark it T-true or F-false. Correct all false statements to make them true.

		Answers
____1.	Each observer needs two earphones.	F-one
____2.	Observers are to check the auditory timing device daily.	True
____3.	Observers should talk freely with the students.	F-shouldn't
____4.	Observers need a minimum of 4 sharp pencils.	F-two
____5.	Observers should check in with the school secretary to tell her which teacher they will be observing and at what times they will be in the room.	True
____6.	Lengthy conversations should take place between observers and teachers.	F-minimal

		Answers
____7.	If you become lost you should call the school for directions.	True
____8.	The auditory timing device should be set for 10 seconds.	F - 8
____9.	Before going to the school, the observer should check to make sure that the persons to be observed will be in attendance that day.	True
____10.	Observers are to be at the observation site 25 minutes before observations are to begin.	F-15 min.

DURING OBSERVATIONS

1. As soon as coding begins, few interruptions should take place. The importance of gathering a continuous flow of data in a highly variable environment cannot be overemphasized. The classroom situation can change very rapidly -- perhaps from one in which the teacher is lecturing to one in which she is asking questions, and in the next few moments to one in which she may be having the children read aloud. If time is spent in what should be preparation activities, e.g., numbering pages, sharpening pencils, etc., then data is irretrievably lost, and, as a result, analyses will be incomplete.

2. When two or more observers are coding in a classroom there should be as little interchange between them as possible. Talking between observers in the classroom should take place only in unusual circumstances, e.g., if an observer has broken both pencil points. Discussions about the teacher, the children, the codes, or the functioning of auditory devices should never occur. The less the distraction caused by observer interaction, the less the possibility of obtaining biased data.

QUIZ: Fill in the blanks with the correct word(s). Check your answers with the ones given on the right in the answer column.

		Answers
1.	The classroom situation can change very _____.	rapidly
2.	Observers should collect a _____ flow of data.	continuous
3.	The less observer interaction, the less the possibility of obtaining _____ data.	biased
4.	Reliability checks in the classroom _____ include talking about each entry with the other observer.	should not
5.	Talking between observers in the classroom should take place only in _____ circumstances, such as if an observer has broken both pencil points.	unusual

FOLLOWING OBSERVATIONS

When an observer has completed his observations for the day, the following procedure should be carried out.

1. Leave the classroom as quietly as possible, and stop at the office to tell the secretary you have completed your observation.

2. Complete information on all sheets and return all the data to the observation office.

3. At the office, you can make any corrections you did not make in the classroom. Sometimes after thinking about a particular sequence of behaviors, you may want to replace the code you used with one you feel better describes the behavior exhibited by the person you were coding.

4. Enter any coding questions in the Observer's Log Book. These questions will be answered periodically.

5. Calculate separately the number of minutes for which data were collected for Group and Individual settings; calculate the total time in minutes and enter the results on the Observation Time Chart.

QUIZ: Fill in the blanks with the correct word(s). Check your answers with the one given on the right in the answer column.

	Answers
1. Questions regarding coding should be entered in the Observer's _____ _____.	Log Book
2. The number of minutes for _____ and Individual settings should be calculated separately.	Group
3. The total minutes for both Group and Individual should be entered in the Observation _____ Chart.	Time

Answers

4. When the day's observations are completed, the observer should leave the classroom _____. quietly

5. The observer should tell the _____ that the observation is completed. secretary

6. Data should be returned to the _____ _____. observer office

7. _____ you were unable to make in class can be made once you have returned to the observation office. Corrections

Footnotes

1 - Auditory timing devices may be obtained from R.C.S. Enterprises, 2883 Kincaid, Eugene, Oregon, 97403.